

## **MATRIX FOR THE 8-HOUR STRUCTURAL III EXAMINATION**

### **SEISMIC ISSUES**

- FORCE DISTRIBUTION
  - Irregularities
  - Deformation Compatibilities
  - Basic Dynamics
- SITE EFFECTS
  - Soil Structure Interaction
  - Foundation Design
- STRUCTURAL COMPONENT DESIGN
  - Primary LFRS Members
  - Diaphragms, Chords and Collectors
- DETAILING AND DUCTILITY
  - Members
  - Connections
- NON-STRUCTURAL COMPONENTS
  - Forces on Elements
  - Anchorage

### **OTHER ISSUES (Loads, Design, Detailing)**

- Wind
- Snow Drifting
- Load Combinations
- Verify Computer Output

### **STRUCTURAL DESIGN STANDARDS**

**UBC, Uniform Building Code, 1997 edition. International Conference of Building Officials, Whittier, CA, with appropriate National standards for various materials, i.e. AISC, 9<sup>th</sup> edition for ASD or 2<sup>nd</sup> edition for LRFD.**

**AASHTO, Standard Specifications for Highway Bridges, Sixteenth Edition, 1996, plus interims for 1997 and 1998, American Association of State Highway and Transportation Officials, Washington, D.C.**

**WSDOT Bridge Design Manual (latest version), Washington Department of Transportation, Olympia, WA.**